

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A humidity control system which includes an adsorber for controlling the humidity of air to be processed using an adsorbent and a refrigerant circuit for operating on a refrigeration cycle and thermally regenerates the adsorber with heat of refrigerant in the refrigerant circuit,

wherein the adsorber is formed by adsorption heat exchangers connected to the refrigerant circuit and having the refrigerant flowing inside therethrough and an adsorbent carried on their surfaces, and

the humidity control system is configured so that the sensible heat zone (R) for the refrigerant is larger than that for R22 when compared in terms of refrigeration cycles having substantially the same discharge temperature (B).

2. (Previously Presented) The humidity control system of claim 1, wherein the refrigerant circuit is configured so that the pressure of the refrigerant in the high-pressure side of the refrigeration cycle is higher than the critical pressure of the refrigerant.

3. (Previously Presented) The humidity control system of claim 1, wherein the refrigerant is a single refrigerant of R32 or a mixed refrigerant containing R32 in the range from 75 weight% inclusive to 100 weight% exclusive.

4. (Previously Presented) The humidity control system of claim 2, wherein the refrigerant is CO₂ refrigerant.

5-12. (Cancelled)